California Public Utilities Commission

SUMMARY OF COMMENTS SUBMITTED IN RESPONSE TO THE REPORT "ACHIEVING A 33% RENEWABLE ENERGY TARGET"

December 15, 2005

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INTRODUCTION

On November 1, 2005, the Center for Resource Solutions issued its report "Achieving a 33% Renewable Energy Target". The report, developed on behalf of the California Public Utilities Commission, evaluates the feasibility and implications of expanding California's Renewables Portfolio Standard to include a goal of 33 percent renewable energy by 2020. On November 17, 2005, a workshop was held in which interested parties were given the opportunity to ask clarifying questions regarding the methodology, contents and recommendations of the report. On the basis of the report and the information they received during the workshop, interested parties were encouraged to submit comments on the report to the Commission no later than December 1, 2005. Eight sets of comments were received from a variety of stakeholders including investor owned utilities (Pacific Gas & Electric Corporation and San Diego Gas & Electric Company), municipal/publicly owned utilities (California Municipal Utilities Association, Northern California Power Agency), energy service providers (The Alliance for Retail Energy Markets), independent energy producers (RCM – Biothane), environmental advocates (Union of Concerned Scientists), and one member of the public. These comments are summarized below. Complete versions of the comments have been made available on the CPUC website at http://www.cpuc.ca.gov/static/_spotlight/051206_renewablescomments.htm.

INVESTOR OWNED UTILITIES (IOUs)[1]

PG&E

- **CPUC Should Not Endorse the 33 Percent Goal on the Basis of this Report Alone**

PG&E is concerned that the CPUC is taking a significant policy position with regard to the RPS on the basis of a report that was produced under an accelerated time frame and that, importantly, was not informed by the stakeholder process. They note that the report itself acknowledges that insufficient time was available to explore issues in depth, and furthermore, that the comment process was severely limited. No reply comments are to be filed prior to the issuance of a final draft and furthermore, no rethinking of issues in the report will be conducted on the basis of comments received. PG&E suggests that the Commission should avoid endorsing the report until a more comprehensive assessment of the issues can be made under a process more open to stakeholder participation.

[1] Southern California Edison did not submit comments on the report.

- **Cost and Rate Impact Analysis Not Sufficiently Robust to Draw Meaningful Conclusions Regarding the Economic Benefits of an Expanded RPS**

PG&E observes that the report itself indicates that "plausible changes to the underlying assumptions drive a wide range of potential cost impacts", focusing specifically on the negative impacts (in which rates over the 2010 to 2030 period increase) of reducing the gas price forecast and/or increasing the assumed costs of renewable production. PG&E also suggests that a number of the assumptions used in the report tend to understate the costs/overstate the benefits associated with renewable energy. PG&E argues that the costs of transmission improvements necessary to support a 33 percent renewable energy goal are unrealistically low, specifically citing the low transmission utilization rates associated with intermittent resources, the probability that many of the renewable resources used to meet the 33 percent goal will be located relatively remote to load centers, as well as the need to upgrade the existing system to maximize capacity and ensure service to "Reliability Must Run/Local Capacity Reserve Requirement load pockets". PG&E also suggests that the assumption in the report that renewable energy will be acquired at the cost of production rather than at the prevailing market rate for energy is unrealistic. According to PG&E, the price of renewable power will be determined by the market, not by the costs of production and thus any difference between the market price and the cost of production will represent profits that flow to renewable generators, not savings to California ratepayers. In PG&E's view, the analysis fails to adequately account for the cost associated with integrating the large amounts of intermittent resources that would likely be required to satisfy a 33 percent target. These costs include those associated with increasing the flexibility of the system and/or deploying storage technologies. The model also overstates the benefits, in terms of reduced gas prices an augmented RPS is presumed to provide (by reducing demand for gas from the power sector) California consumers. PG&E suggests that the multiplier used in this analysis fails to account for the fact that California has significant idle pipeline capacity. PG&E further notes that the availability and mix of renewable resources assumed in the report for the rate analysis is highly speculative.

- **RPS Program Should be Consistent with the State's Greenhouse Gas Reduction Goals**

To the extent that the 33 percent goal is motivated by the benefits greater reliance on renewable energy offers in terms of reducing greenhouse gas emissions, the Commission should be relatively indifferent as to where the renewable energy projects are located. In other words renewable energy projects located outside of the state should count toward the RPS goal. Similarly, the Commission should be amenable to the use of Renewable Energy Credits for purposes of RPS compliance, both in-state and out of state, so long as the carbon reduction credit is "appropriately assigned to the state". In addition, if GHG emission reductions can be achieved through means other than, or in lieu of, increased reliance on renewable generation, the Commission should be open to these options. As such PG&E endorses the report's suggestion that the 33 percent goal be established as a planning target, rather than as an RPS mandate.

- **Contracted, Rather than Delivered, Power Should Count Toward RPS Compliance Goals**

PG&E recommends that the report's recommendations regarding critical actions necessary to achieve the 20% by 2010 goal be expanded to include revisitation of the flexible compliance rules adopted in D.03-06-071. Specifically PG&E suggests that the rules be changed such that contracted power can count toward a utility's RPS goals. PG&E views the current compliance requirements as unnecessarily rigid, potentially forcing utilities to purchase renewable power on the basis of what can be delivered more quickly rather than on the basis of least-cost, best fit criteria.

- **Renewable Energy Incentives are Preferred to Additional RPS Mandates**

Consistent with their comments regarding flexible compliance in the context of the 2010 goal, PG&E argues that adoption of an additional mandatory requirement in the RPS inclusive of a penalty-based compliance framework may force the hand of utilities to select resources that will not "be in customer's best interests". In general PG&E inveighs against any proposition in the report that would reduce the flexibility in how the utilities procure renewable resources. Specifically PG&E rejects the report's proposal that utilities be required to hold less frequent but larger RPS solicitations, and expresses its opposition to the establishment of contract submission deadlines, standardization of procurement practices, contract terms and conditions, and standard contract offers.

- **The Costs of Potential Contract Failure Should Not Fall on Utilities Alone**

PG&E believes that the report's recommendation to encourage/require overcontracting as a hedge against contract failure is unfairly burdensome to utilities, arguing that such a policy would create disincentives to pursue more risky, but potentially promising new technologies and locations.

- **CPUC Should Continue to Pursue Efforts at FERC and CAISO to Facilitate Transmission Planning and Siting for Renewables**

PG&E is supportive of the various recommendations made by the report regarding ways to ensure that sufficient transmission infrastructure is available to support renewables development consistent with the 2010 and potential 2020 goals. These recommendations include having the CPUC support efforts before FERC and the ISO to include state renewable energy goals in the ISO's criteria for determining whether or not a project is needed (in addition to economic and reliability reasons), CPUC support at FERC for assurance of cost recovery associated with proactively built transmission infrastructure to facilitate renewable energy development, implementation of backstop cost recovery pursuant to Public Utilities Code 399.25, and authorization of recovery of costs associated with transmission permitting processes. PG&E agrees with the report that the "pancaking" of transmission rates for non-ISO members is a legitimate concern.

- **Market Price Referent and Supplemental Energy Payments Cap Total RPS Program Costs**

PG&E disagrees with the Report's recommendation to eliminate the MPR and SEP on the grounds that these mechanisms provide a useful way to cap the overall costs of the RPS program. PG&E disputes the notion that the MPR results in bids that are higher than they would otherwise be, and notes that other factors are likely to exert far more upward pressure on prices than the MPR. Although PG&E agrees that the SEP process is cumbersome, it should not be eliminated unless some other approach to limiting the total costs of complying with the RPS is established.

- **Existing RPS Mandates Should be Applied to Publicly Owned Utilities, Community Choice Aggregators, and Energy Service Providers Before Additional Requirements are Imposed on the Investor Owned Utilities**

PG&E suggests that the application of the RPS to publicly owned utilities, community choice aggregators, and energy service providers needs to be resolved before establishing additional RPS targets on the IOU's.

- **Distributed Generation Was Not Adequately Considered in the Report**

PG&E suggests that distributed generation could provide an additional option to meeting the RPS targets that is worthy of further consideration. They note that the report could be strengthened by including in its analysis consideration of a broader range of sources and pricing assumptions particularly related to photovoltaics. In that regard PG&E suggests that the report should recognize that there are a number of other technologies that offer more cost effective greenhouse gas reduction benefits.

San Diego Gas & Electric

- **Cost and Rate Impact Analysis Not Sufficiently Robust to Draw Meaningful Conclusions Regarding the Economic Benefits of an Expanded RPS**

Noting specifically that the gas price forecast used in the report is substantially higher than a recent forecast produced by Cambridge Energy, SDG&E suggests that the conclusion of the report that an expanded RPS will likely result in net savings for California ratepayers is premature at best. In addition to concerns regarding the gas price forecast, SDG&E notes that the report doesn't consider the price impacts of a 33 percent target, given the dramatic increase in demand for renewable energy this expanded target represents. In light of these issues, SDG&E suggests the assessment of rate impacts warrants additional analysis and further testing of assumptions before any conclusions should be drawn.

- **The Report is Overly Optimistic Regarding the Ability of the State to Address the Transmission Constraints Impacting Renewables Development**

Transmission constraints represent a significant hurdle to the state's renewable energy goals that, if unaddressed, will make achievement of those goals unlikely. SDG&E believes that although the report acknowledges this issue, and offers policy recommendations to address it, it doesn't actually incorporate this concern into its assessment of the feasibility of a 33 percent renewable energy target, instead assuming that all of the transmission related obstacles are overcome.

- **Increased Penalties and Enforcement Efforts Would be Counterproductive**

SDG&E argues that the report's recommendation regarding a more stringent RPS enforcement regime would give developers additional market power, which could result in increased costs, to the detriment of the utilities and ratepayers alike. SDG&E also warns that such a regime could inadvertently punish utilities for factors beyond their control.

- **Standard Offer Contracts Are Unduly Restrictive and Should Not be Pursued**

From SDG&E's perspective, standard offer contracts undermine the ability of parties to reach mutually beneficial agreements that rely on admittedly time consuming negotiation. In light of the long-term nature of some of the contracts that utilities are likely to seek under the RPS, flexibility is viewed as a critical element.

- **There are a Number of Other Issues the CPUC Needs to Address Before Adopting a 33 Percent Renewable Energy Goal**

Though not going into much detail, SDG&E identifies a number of other issues that it believes should be addressed prior to adoption of any additional RPS mandates. These include the impact on system operations of increasing the amount of intermittent power on the grid, greater integration between an expanded RPS and other CPUC mandates and programs (e.g., distributed generation energy efficiency goals, resource adequacy, net metering, etc.), extending RPS requirements to the non-IOU LSEs, stabilization of PTC and ITC tax incentives, establishment of "favorable capital structures and returns that promote utility ownership of renewable resources", providing regulatory certainty and greater transparency regarding the process by which SEP funds are allocated.

PUBLICLY OWNED UTILITIES (POUs)

Northern California Power Agency

- **Publicly Owned Utilities are not Barriers to Achieving RPS Goals as Suggested by the Report**

NCPA rejects the report's apparent assertion that the "failure to include POUs in mandated renewable standards and goals is a problem", arguing that this alleged problem is based almost exclusively on the Kema-Xenergy draft report "Barrier's to Achieving the State's Aggressive Renewable Goals" produced for the CEC. NCPA observes that this report's conclusions are based on interviews with "RPS stakeholders" and failed to include any POUs. NCPA believes the report's reliance on this perspective is significantly biased, and furthermore, fails to consider evidence offered by another CEC-sponsored report entitled "Publicly Owned Electric Utilities and the California Renewable Portfolio Standard: A Summary of Data Collection Activities" that suggests that POUs voluntary efforts to procure an increasing percentage of their power from renewable sources is on par with, or more aggressive than, those of the investor owned utilities under the RPS. NCPA urges the Commission to consider this information before arriving at any conclusions regarding the efficacy of the renewable policies of the POUs in facilitating the state's renewable energy goals.

- **It is Premature to Move Forward with Additional RPS Legislation**

Citing the Integrated Energy Policy Report's caution against enacting additional RPS legislation at this time, NCPA suggests that review of current RPS processes should be undertaken before contemplating expansion of, or changes to, the existing RPS legislation.

- **The Report Fails to Include the Rate Impacts of the RPS on POU Ratepayers**

The Report's policy recommendation to expand the RPS program to include the publicly owned utilities is not supported or otherwise explored by an analysis of what the rate impacts would be on POU ratepayers. As such the proposition that POUs should face mandatory obligations is premature and cannot be substantiated at this time. POUs, particularly the smaller ones, may have difficulty meeting RPS obligations owing to their small size, lack of locally available renewable resources, etc. According to the NCPA, on the basis of these concerns, the IEPR recommended these smaller POUs be exempted from any RPS legislation.

California Municipal Utilities Association

- **The Rate Impact Analysis is Flawed to the Extent that it Excludes Consideration of the Impacts on Public Utility Ratepayers**

The conclusion in the report that an expanded RPS target is likely to yield California ratepayers a net benefit is based on an analysis that includes only the impacts on investor owned utility ratepayers. While representing a large percentage of ratepayers in the state, they do not represent the totality of ratepayers, and thus, any conclusions drawn from the impact analysis are not necessarily indicative of what the impacts will be on the customers served by public utilities, energy service providers, or community choice aggregators.

- **Publicly Owned Utilities are not Barriers to Achieving RPS Goals as Suggested by the Report**

CMUA takes exception to the report's position that the absence of mandatory RPS obligations for the POUs represents a significant barrier to the state's renewable energy goals. CMUA notes that the PUC § 387 requires the POUs to implement an RPS consistent with the legislature's intent to encourage greater reliance on renewable resources. In addition CMUA cites evidence both from an informal study they conducted as well as that from the CEC-sponsored report "Publicly Owned Electric Utilities and the California Renewable Portfolio Standard: A Summary of Data Collection Activities" that suggests that many POUs are, in fact, well ahead of the IOUs in terms of renewable energy procurement.

ENVIRONMENTAL ADVOCATES

Union of Concerned Scientists

- **CPUC Should Continue Efforts Under its Own Statutory Authority and Through FERC to Ensure Cost Recovery for Renewable Transmission Facilities**

UCS encourages the Commission to engage in talks with FERC staff to further discuss cost recovery for the shared renewable trunk line concept proposed by SCE and to update stakeholders on the outcome of those talks. Simultaneously, the Commission should move forward with other options available to support transmission development to access renewables under its existing statutory authority.

- **Cost and Rate Impact of a 33 Percent Target Deserves Further Analysis**

UCS notes that a number of assumptions/components of the model used in the report to assess the rate impacts of a 33 percent renewable energy target warrant additional analysis and stakeholder input. UCS specifically notes the concerns raised during the November 17th workshop regarding the adequacy of the gas forecast used in the report in light of the current trend in gas prices, the absence of any consideration of potential technology improvements in gas-fired generation, and the non-integrated approach the report took with respect to potential consumer cost savings that may result from reduced demand for gas from the power sector under a 33 percent RPS regime. Although the report does recognize and quantify this benefit, it does so in a separate section rather than integrating the assessment into the rate impact analysis itself. UCS also notes that additional stakeholder input would be useful to determine the amount of gas turbine capacity that would be needed to "back-up" additional wind capacity given resource adequacy requirements of the Commission and the ISO.

- **Policy Changes that Would Benefit Both the Existing RPS Goal and the 33 Percent Goal Should be a Priority**

Overall UCS supports the policy recommendations made in the report to facilitate a 33 percent goal, emphasizing, in particular, its support for those near-term recommendations that would benefit both the 20% by 2010 target and an expanded 33 percent target. Among these near-term recommendations, UCS cited those related to contract failure, streamlining the solicitation cycle, prioritizing issues most critical to achieving RPS targets, augmenting staff, and clarifying the application of penalties. UCS also notes its support for further investigation into "increasing delivery flexibility".

ENERGY SERVICE PROVIDERS (ESPs) & INDEPENDENT ENERGY PRODUCERS

RCM-Biothane

- **Current Net-Metering Rules Don't Provide Appropriate Incentives**

RCM-Biothane recommends that net-metering rules for dairy biogas customers be modified to allow generation to be credited against all components of the utility bill, rather than only the generation component, and that generation in excess of load be credited back at some rate, possibly the utility's avoided costs, rather than being "gifted" at no cost to the utility. This policy change would encourage further development of this generating option by increasing the economic feasibility of such projects.

Alliance for Retail Energy Markets

- **CPUC Should Not Endorse the 33 Percent Goal on the Basis of the Report Alone**

While AReM lauds the report as a "thorough and thoughtful study", they caution against the adoption by the Commission of a policy position that endorses the 33 percent target on its basis alone. The information developed in the report should be supplemented with actual experience gained in the existing RPS program as well more active public/stakeholder participation. To that end, AReM recommends that the Commission open an Order Instituting a Rulemaking to explore whether or not the Commission should adopt a 33 percent renewable energy target.

- **Sensitivity of Cost and Rate Impacts to Changes in Underlying Assumptions Suggests the Commission Should Proceed Slowly**

AReM notes that the there exists a substantial likelihood that the gas price forecast used in the rate impact analysis will be either too high or too low. In light of the fallibility of this assumption, and others embedded in the analysis, AReM urges the Commission to proceed cautiously rather then "[rushing] to judgment" regarding the economic benefits of an expanded RPS target.

- **Allowance of Out of State RECs will be Necessary to Meet a 33% Renewables Target**

AReM concurs with the report's position that out of state RECs will need to be allowed for compliance purposes if a 33 percent goal is to be achievable. AReM believes that by providing a broader array of compliance options rather than limiting eligible resources to those within the state of California, the overall costs of compliance can be reduced.

- **Additional RPS Mandates Limit LSEs' Procurement Options, Thus Foreclosing Opportunities to Exploit New, Environmentally Sound Technologies**

Citing “clean coal” specifically, AReM suggests that a 33 percent renewable energy target may tie the hands of LSEs such that they forego opportunities to invest in alternatives that would yield similar environmental and social benefits while, simultaneously, better meeting the resource needs of the state.

- **Treatment of Renewable Resource for Resource Adequacy Purposes has Significant Implications for Energy Service Providers**

AReM expresses its concern that, assuming the same RPS obligations apply to ESPs as apply to utilities, compliance rules that discount renewable energy’s contribution to resource adequacy requirements are likely to more adversely impact ESPs relative to the impact such an approach would have on utilities, in light of the utilities’ ability to pass these costs on to ratepayers. To the extent that the Commission decides to discount the contribution of renewable generation to resource adequacy requirements, it needs to remain sensitive to the economic implications this approach has for ESPs.

- **Expanding and Strengthening Transmission Capacity Provides Benefits Both in Terms of Facilitating Renewable Development and System Reliability**

As a general matter, AReM supports investments in new transmission resources, not only as a way to facilitate development of renewable energy resources and RPS compliance, but also for the benefits such expansion offers in terms of system reliability, thus obviating the need to invest in additional generation for resource adequacy purposes.

- **Unbundled RECs will Play a Critical Role in Enabling Energy Service Providers to Cost Effectively Achieve RPS goals.**

AReM wholeheartedly supports the notion that unbundled RECs will play a critical role in enabling ESPs to cost-effectively comply with the RPS. In the absence of RECs, ESPs would likely need to enter into long-term power procurement contracts with renewable energy providers, thus requiring them to take on substantial risk, particularly to the extent that the average portfolio commitment of the ESP is shorter than their procurement contracts. RECs allow an ESP to purchase on an as-needed basis, on much shorter contract terms, and to purchase renewable energy at the market clearing price for renewable energy, thus mitigating the ability of renewable generators to “exercise market power in times of scarcity”. More generally, AReM supports the report’s position that

ESPs face unique challenges in complying with the RPS (including the fact that they are starting at a lower initial level of renewable representation in their portfolios relative to utilities, and the much reduced capacity for ESPs to enter into long-term contracts with renewable energy providers) and thus should be given additional procurement flexibility. Such flexibility would entail allowing the use of unbundled RECs, allowing shorter-term contracts, and waiving the detailed procurement process requirements imposed on the state's IOUs.

Member of the Public

- **The Net Benefits of an Expanded RPS May Be Greater Than Those Estimated in the Report**

Downward trends in the price of renewable energy technologies, particularly solar, suggest that the net benefits of an expanded RPS could be larger than those estimated in the rate and impact analysis provided in the report.

- **Over-Procurement of Renewable Resources as a Hedge Against Contract Failure is a Reasonable Proposition**

The report correctly suggests that in light of the very real possibility of contract failure, in which projects selected for purposes of RPS compliance fail to develop as planned, a policy approach in which utilities are required or encouraged to "over-procure" would help ensure that RPS compliance targets and the state's renewable energy goals are met.

- **RECs Could Compromise Some of the Goals Sought Through the RPS**

Use of unbundled and out of state RECs engender a number of problems including increased administrative complexity, potentially making the system more prone to gaming and fraud, and could compromise some of the benefits that would be realized if eligible resources were confined to in-state resources (e.g., economic benefits).

- **Voluntary Renewable Energy Markets Have a Poor Track Record**

The report advocates for green pricing programs, despite the poor history such programs have in gaining customers and ensuring that the extra revenues associated with these programs are invested in new renewable generating facilities.